## SEQUENCE LISTING

```
<110> PIERRE FABRE MEDICAMENT
<120> USE OF BACTERIAL MEMBRANE FRACTIONS WITH ADJUVANT EFFECT, THEIR METHODS
      OF PREPARATION AND PHARMACEUTICAL COMPOSITION CONTAINING THEM
<130> D17975
<140> FR 99 03513
<141> 1999-03-15
<160> 4
<170> PatentIn Vers. 2.0
<210> 1
<211> 1035
<212> DNA
<213> Klebsiella pneumoniae
<220>
<221> exon
<222> (1)..(1032)
<220>
<221> intron
<222> (1033)..(1035)
<220>
<221> CDS
<222> (1)..(1032)
<400> 1
atg aaa gca att ttc gta ctg aat gcg gct ccg aaa gat aac acc tgg
                                                                   48
Met Lys Ala Ile Phe Val Leu Asn Ala Ala Pro Lys Asp Asn Thr Trp
                                     10
tat gca ggt ggt aaa ctg ggt tgg tcc cag tat cac gac acc ggt ttc
                                                                   96
Tyr Ala Gly Gly Lys Leu Gly Trp Ser Gln Tyr His Asp Thr Gly Phe
                                 25
tac ggt aac ggt ttc cag aac aac ggt ccg acc cgt aac gat cag
                                                                   144
Tyr Gly Asn Gly Phe Gln Asn Asn Gly Pro Thr Arg Asn Asp Gln
                             40
                                                  45
ctt ggt gct ggt gcg ttc ggt ggt tac cag gtt aac ccg tac ctc ggt
                                                                   192
Leu Gly Ala Gly Ala Phe Gly Gly Tyr Gln Val Asn Pro Tyr Leu Gly
     50
                                              60
ttc gaa atg ggt tat gac tgg ctg ggc cgt atg gca tat aaa ggc agc
                                                                   240
Phe Glu Met Gly Tyr Asp Trp Leu Gly Arg Met Ala Tyr Lys Gly Ser
                                         75
gtt gac aac ggt gct ttc aaa gct cag ggc gtt cag ctg acc gct aaa
                                                                   288
Val Asp Asn Gly Ala Phe Lys Ala Gln Gly Val Gln Leu Thr Ala Lys
                                     90
ctg ggt tac ccg atc act gac gat ctg gac atc tac acc cgt ctg ggc
                                                                   336
Leu Gly Tyr Pro Ile Thr Asp Asp Leu Asp Ile Tyr Thr Arg Leu Gly
            100
                                105
ggc atg gtt tgg cgc gct gac tcc aaa ggc aac tac gct tct acc ggc
                                                                   384
Gly Met Val Trp Arg Ala Asp Ser Lys Gly Asn Tyr Ala Ser Thr Gly
                            120
                                                125
gtt tcc cgt agc gaa cac gac act ggc gtt tcc cca gta ttt gct ggc
                                                                   432
Val Ser Arg Ser Glu His Asp Thr Gly Val Ser Pro Val Phe Ala Gly
                        135
ggc gta gag tgg gct gtt act cgt gac atc gct acc cgt ctg gaa tac
                                                                   480
Gly Val Glu Trp Ala Val Thr Arg Asp Ile Ala Thr Arg Leu Glu Tyr
                    150
                                        155
cag tgg gtt aac aac atc ggc gac gcg ggc act gtg ggt acc cgt cct
                                                                   528
Gln Trp Val Asn Asn Ile Gly Asp Ala Gly Thr Val Gly Thr Arg Pro
                                    170
gat aac ggc atg ctg agc ctg ggc gtt tcc tac cgc ttc ggt cag gaa
                                                                   576
```

```
Asp Asn Gly Met Leu Ser Leu Gly Val Ser Tyr Arg Phe Gly Gln Glu
                                 185
                                                     190
            180
gat gct gca ccg gtt gtt gct ccg gct ccg gct ccg gct ccg gaa gtg
                                                                    624
Asp Ala Ala Pro Val Val Ala Pro Ala Pro Ala Pro Ala Pro Glu Val
                            200
                                                 205
        195
gct acc aag cac ttc acc ctg aag tct gac gtt ctg ttc aac ttc aac
                                                                    672
Ala Thr Lys His Phe Thr Leu Lys Ser Asp Val Leu Phe Asn Phe Asn
                        215
                                                                    720
aaa gct acc ctg aaa ccg gaa ggt cag cag gct ctg gat cag ctg tac
Lys Ala Thr Leu Lys Pro Glu Gly Gln Gln Ala Leu Asp Gln Leu Tyr
                    230
                                         235
act cag ctg agc aac atg gat ccg aaa gac ggt tcc gct gtt gtt ctg
                                                                    768
Thr Gln Leu Ser Asn Met Asp Pro Lys Asp Gly Ser Ala Val Leu
                245
                                     250
ggc tac acc gac cgc atc ggt tcc gaa gct tac aac cag cag ctg tct
                                                                    816
Gly Tyr Thr Asp Arg Ile Gly Ser Glu Ala Tyr Asn Gln Gln Leu Ser
            260
                                 265
                                                     270
gag aaa cgt gct cag tcc gtt gtt gac tac ctg gtt gct aaa ggc atc
                                                                    864
Glu Lys Arg Ala Gln Ser Val Val Asp Tyr Leu Val Ala Lys Gly Ile
                             280
                                                 285
        275
                                                                   912
ccq gct ggc aaa atc tcc gct cgc ggc atg ggt gaa tcc aac ccg gtt
Pro Ala Gly Lys Ile Ser Ala Arg Gly Met Gly Glu Ser Asn Pro Val
                        295
                                             300
                                                                   960
act ggc aac acc tgt gac aac gtg aaa gct cgc gct gcc ctg atc gat
Thr Gly Asn Thr Cys Asp Asn Val Lys Ala Arg Ala Ala Leu Ile Asp
                    310
                                         315
                                                             320
tgc ctg gct ccg gat cgt cgt gta gag atc gaa gtt aaa ggc tac aaa
                                                                   1008
Cys Leu Ala Pro Asp Arg Arg Val Glu Ile Glu Val Lys Gly Tyr Lys
                325
                                     330
                                                         335
gaa gtt gta act cag ccg gcg ggt taa
                                                                   1035
Glu Val Val Thr Gln Pro Ala Gly
            340
<210> 2
<211> 344
<212> PRT
<213> Klebsiella pneumoniae
<400> 2
Met Lys Ala Ile Phe Val Leu Asn Ala Ala Pro Lys Asp Asn Thr Trp
Tyr Ala Gly Gly Lys Leu Gly Trp Ser Gln Tyr His Asp Thr Gly Phe
Tyr Gly Asn Gly Phe Gln Asn Asn Gly Pro Thr Arg Asn Asp Gln
Leu Gly Ala Gly Ala Phe Gly Gly Tyr Gln Val Asn Pro Tyr Leu Gly
                                              60
Phe Glu Met Gly Tyr Asp Trp Leu Gly Arg Met Ala Tyr Lys Gly Ser
                     70
                                          75
Val Asp Asn Gly Ala Phe Lys Ala Gln Gly Val Gln Leu Thr Ala Lys
                 85
                                      90
Leu Gly Tyr Pro Ile Thr Asp Asp Leu Asp Ile Tyr Thr Arg Leu Gly
            100
                                105
Gly Met Val Trp Arg Ala Asp Ser Lys Gly Asn Tyr Ala Ser Thr Gly
        115
                            120
Val Ser Arg Ser Glu His Asp Thr Gly Val Ser Pro Val Phe Ala Gly
    130
                        135
                                             140
Gly Val Glu Trp Ala Val Thr Arg Asp Ile Ala Thr Arg Leu Glu Tyr
                    150
                                         155
```

```
Gln Trp Val Asn Asn Ile Gly Asp Ala Gly Thr Val Gly Thr Arg Pro
                                  170
Asp Asn Gly Met Leu Ser Leu Gly Val Ser Tyr Arg Phe Gly Gln Glu
                                                 190
                              185
           180
Asp Ala Ala Pro Val Val Ala Pro Ala Pro Ala Pro Ala Pro Glu Val
                                             205
                          200
Ala Thr Lys His Phe Thr Leu Lys Ser Asp Val Leu Phe Asn Phe Asn
                      215
                                         220
Lys Ala Thr Leu Lys Pro Glu Gly Gln Gln Ala Leu Asp Gln Leu Tyr
                                     235
                  230
Thr Gln Leu Ser Asn Met Asp Pro Lys Asp Gly Ser Ala Val Leu
                                  250
              245
Gly Tyr Thr Asp Arg Ile Gly Ser Glu Ala Tyr Asn Gln Gln Leu Ser
                              265
           260
Glu Lys Arg Ala Gln Ser Val Val Asp Tyr Leu Val Ala Lys Gly Ile
                          280
                                             285
Pro Ala Gly Lys Ile Ser Ala Arg Gly Met Gly Glu Ser Asn Pro Val
                      295
Thr Gly Asn Thr Cys Asp Asn Val Lys Ala Arg Ala Ala Leu Ile Asp
                  310
                                     315
Cys Leu Ala Pro Asp Arg Arg Val Glu Ile Glu Val Lys Gly Tyr Lys
                                  330
               325
Glu Val Val Thr Gln Pro Ala Gly
           340
<210> 3
<211> 303
<212> DNA
<213> Respiratory syncytial virus, G2Na
<220>
<221> CDS
<222> (1)..(303)
<400> 3
                                                              48
acc gtg aaa acc aaa aac acc acg acc cag acc cag ccg agc aaa
Thr Val Lys Thr Lys Asn Thr Thr Thr Gln Thr Gln Pro Ser Lys
                5
                                  10
96
Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro Pro Asn Lys Pro Asn Asn
            20
                               25
gat ttc cat ttc gaa gtg ttc aac ttc gtg ccg tgc agc atc tgc agc
                                                              144
Asp Phe His Phe Glu Val Phe Asn Phe Val Pro Cys Ser Ile Cys Ser
                           40
aac aac ccg acc tgc tgg gcg atc tgc aaa cgt atc ccg aac aaa aaa
                                                              192
Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys Arg Ile Pro Asn Lys Lys
    50
                       55
240
Pro Gly Lys Lys Thr Thr Lys Pro Thr Lys Lys Pro Thr Phe Lys
                   70
                                     · 75
acc acc aaa aaa gat cat aaa ccg cag acc acc aaa ccg aaa gaa gtg
                                                              288
Thr Thr Lys Lys Asp His Lys Pro Gln Thr Thr Lys Pro Lys Glu Val
                                   90
ccg acc acc aaa ccg
                                                              303
Pro Thr Thr Lys Pro
           100
```

<210> 4 <211> 101

<212> PRT

## <213> Respiratory syncytial virus, G2Na

<400> 4 Thr Val Lys Thr Lys Asn Thr Thr Thr Gln Thr Gln Pro Ser Lys 10 Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro Pro Asn Lys Pro Asn Asn 20 25 Asp Phe His Phe Glu Val Phe Asn Phe Val Pro Cys Ser Ile Cys Ser 40 Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys Arg Ile Pro Asn Lys Lys 55 50 Pro Gly Lys Lys Thr Thr Lys Pro Thr Lys Lys Pro Thr Phe Lys 75 70 Thr Thr Lys Lys Asp His Lys Pro Gln Thr Thr Lys Pro Lys Glu Val 90 85 Pro Thr Thr Lys Pro 100